I. COURSE DESCRIPTION

This is a course in philosophy. One sub-field in philosophy is called philosophy of mind. Philosophy of mind investigates what minds are, and how they relate to the physical world. Philosophers of mind frequently offer courses in philosophy of psychology. Philosophy of psychology is also a sub-field of philosophy of science. A class in philosophy of psychology investigates the status of leading psychological theories of the mind and visits foundational questions about the nature of the mind.

This term, my focus will be twofold. First, and most centrally, we’ll be focusing on the most influential contemporary view about the nature of the mind: the view that the mind
is ultimately just a computational device. (Psychologists and philosophers who hold this view and work within this framework are said to be doing “computational psychology”). This view is also influential in the field of cognitive science, which is a multidisciplinary field that studies the brain (it consists of fields such as cognitive neuroscience, philosophy of mind, AI, cognitive psychology, and more). We will try to answer the question: are we ultimately just sophisticated computers?

(Note: the topics of modularity, innateness, concepts, memory and attention will be covered in detail in my planned Introduction to Cognitive Science class. The first two of these topics are also covered here).

II. GOALS:

At the beginning of the class, students will learn the major positions on the nature of mind. Then, we will turn to the contemporary drive to explain the mind as a sophisticated computer. After learning about theoretical work in computational psychology and cognitive science more generally, we will examine various research programs that try to make conscious and intelligent robots. Students will learn to critically present the issues covered, both verbally and in writing.

III. TEXTS:


In addition, various papers are on the web and on reserve. (Some of the papers on the web may be copied to the P-drive, and will be located in the same folder that the class notes are located).

Warning: much of the material for this class is tough. It is natural to find some of the language puzzling. You may have to read the items a few times. It often helps to read them again after lecture.

To make things as clear as possible, I generally put my lecture notes on the web so that you can review them. Further, we discuss the readings carefully in class. You will work in groups in class to discuss the readings at various points.

IV. COURSE REQUIREMENTS:

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<th>Requirements</th>
<th>Percent of Final Grade</th>
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<td>Class presentations and participation</td>
<td>15%</td>
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Paper, due on the last day of classes…………………………………………………………35%

Exams (final and mid-term)……………………………………………………………………50% (25% each)

About the Requirements:

**Paper** - There will be a 6 page seminar paper. Students are encouraged to select a topic for one of their presentations that they have special interest in, and build upon this same topics for their papers. (Although they are not required to do it this way). Students are required to present and defend an outline of the main argument of the paper in class at mid-term time. Due the last day of classes.

Students are required to read the three documents on writing and reading a philosophy paper, and on philosophical terminology, by Jim Pryor. These are linked to on my website, under “courses.” Please read them immediately.

**Presentations and participation**—There will be presentations on the readings and on special topics.

**Exam** – There will be a mid-term and a final exam. The mid-term will be an in class exam, and will involve short answers. The final exam will be a take home final, with long essay questions.

A few important notes: The contents of the syllabus may change to accommodate special scheduling issues in our class. Please bear in mind that students need to attend 2/3 of the classes to pass, and that good attendance does not mean that someone deserves a high mark (that requires that one hands in good work as well). Any plagiarism will be handled very strictly, and in consultation with the dean’s office.

**V. CLASS FORMAT**

The class will be a mixture of lecture and discussion. On many days, we will begin each class with a student presentation on the readings. I hope that you will all have views about the topics we will address, and I want you to express and explore those views. (And by the way, I certainly understand and appreciate admissions of confusion!).

The readings and material are difficult. However, we will also have a few “breaks.” We will have two films (one documentary on robots, bugs, and other things, which is a bit of a cult film, and one science fiction film, *Blade Runner*).

It is the nature of the issues we will be considering that people's views will differ. You are encouraged to question your classmates (and me) when anyone says something you disagree with. “Minority” opinions are often the most informative ones. For philosophy encourages students to “think outside of the box.”

**VI. TOPICS AND READINGS**
Readings from the Kim book are listed by a "K" followed by the chapter number (e.g., K3). Page numbers are added when only some of a chapter is assigned.

I. Overview of the discipline of philosophy of psychology (as distinct from philosophy of mind) and leading historical theories of the mind:

1. Dualism

K1 and K6, pp. 125-132 (outline/reaction assigned)

2. Behaviorism

K2.

3. Type-Type Identity Theory and Reduction

K3 and K9, pp. 211-221 (outline/reaction due)

II. Functionalism, Computationalism and Modularity: some basics

K4 (outline/reaction due)

Block, Ned. "What is Functionalism?" at:
At: http://www.nyu.edu/gsas/dept/philo/faculty/block/papers/functionalism.html
K9, pp. 221-226. (outline/reaction due)

Jerry Fodor, Precis of Modularity of Mind (reserve). (outline/reaction)


III. Functionalism and AI

Turing, Alan. "Computing Machinery and Intelligence." 1950
Available at: http://cogprints.ecs.soton.ac.uk/archive/00000499/00/turing.html

Ned Block, “The Mind as the Program of the Brain”
At: http://www.nyu.edu/gsas/dept/philo/faculty/block/papers/msb.html

K5

IV. Interlude: Android Rights?

Phillip Dick. Film – Blade Runner (Do Androids Dream of Electric Sheep?)
Recommended: Peter Singer. “All Animals are Equal” (for work on Speciesism, which also addresses AI issues). Reserve.

V. What is the format of thought? The LOT/Connectionism Debate:

Murat Aydede, Language of Thought, Stanford Encyclopedia of Philosophy
Look up at: http://plato.stanford.edu/

Connectionism. Stanford Encyclopedia of Philosophy
http://plato.stanford.edu/
Paul Churchland, excerpts from *Engine of Reason, Seat of the Soul* (reserve). 
Jerry Fodor, “Review of Paul Churchland’s Engine of Reason, Seat of the Soul” (reserve).

Recommended: Cynthia Macdonald, “Introduction: Classicism v. Connectionism” (On reserve)

**VI. Beyond Connectionism: Dynamic Systems Theory, Subsumption Architecture, the “Embodied/Embeded” approach and so on.**
Andy Clark’s Millenial Perspective on rationality in *Mind and Language*. (reserve)
Excerpts from Andy Clark’s *Being There* (reserve)
Eric Lormand’s review of *Being There* (reserve)
Excerpts from Rodney Brooks, *Flesh and Machines: How Robots Will Change Us*. (reserve)

Additional assignment: visit the websites at the MIT media center.
Documentary film, “Fast, Cheap, and Out of Control” (parts that interview Rodney Brooks on his subsumption architecture).

**Some cool websites:**

Kurzweil net is an incredible resource of popular science papers on AI, nanotechnology, etc. [http://www.kurzweilai.net/index.html?flash=2](http://www.kurzweilai.net/index.html?flash=2)


New work on androids: AndroidScience.com (in particular, see the film clips from the Discover channel).

Ned Block’s Minds and Machines course website: [http://www.nyu.edu/gsas/dept/philo/courses/mindsandmachines/](http://www.nyu.edu/gsas/dept/philo/courses/mindsandmachines/)
The above site has tons of good papers.

Alan Turing: [http://www.turing.org.uk/turing/](http://www.turing.org.uk/turing/)

The Turing Test page: [http://cogsci.ucsd.edu/~asaygin/tt/ttest.html#new](http://cogsci.ucsd.edu/~asaygin/tt/ttest.html#new)
Talk to some programs.

The following cite has an extensive bibliography in philosophy of mind and cognitive science, including lots of online papers:
[http://www.u.arizona.edu/~chalmers/](http://www.u.arizona.edu/~chalmers/)

Some useful reference works: